DIN EN ISO 6504-3:2020-04 (E)

Paints and varnishes - Determination of hiding power - Part 3: Determination of hiding power of paints for masonry, concrete and interior use (ISO 6504-3:2019)

Contents

Page

European foreword ... **3**

Foreword ... **4**

Introduction ... **5**

1 Scope ... **6**

2 Normative references ... **6**

3 Terms and definitions ... **6**

4 Symbols and abbreviated terms ... **7**

5 Principle ... **9**

6 Apparatus ... **9**

7 Sampling ... **11**

8 Procedure and calculation ... **12**

8.1 Preparation of substrate ... 12

8.1.1 Method A (foil) ... 12

8.1.2 Method B and Method C (black and white charts) ... 12

8.2 Preparation of coated foils or black and white charts ... 12

8.3 Determination of the spreading rate of the test specimen ... 12

8.3.1 Calculation of the surface mass density ... 12

8.3.2 Determination of the density ... 14

8.3.3 Determination of the non-volatile matter ... 14

8.3.4 Calculation of the theoretical dry- or wet-film thickness (method A, method B and method C) ... 14

8.3.5 Calculation 1 – Determination of the theoretical spreading rate by calculation from the non-volatile matter content determined in accordance with ISO 3251 and the density of the coating material (see ISO 3233-3) (method A and method B) ... 15

8.3.6 Calculation 2 – Determination of the theoretical spreading rate calculated with the different coated masses on the two charts (method C), the density of the coating material according to ISO 2811 (all parts) and the coated area ... 17

8.4 Measurement of tristimulus value Y_{10} and calculation of the hiding power H_{10} ... 18

8.4.1 General ... 18

8.4.2 Method A (foil) ... 18

8.4.3 Method B (black and white charts) ... 18

8.4.4 Method C (black and white charts) ... 18

8.5 Graphical method for determination of the hiding power at a given spreading rate (method C) ... 19

8.5.1 General ... 19

8.5.2 Determination by graphical method ... 19

8.5.3 Determination by calculation with a known slope ... 21

9 Designation of the test result ... **22**

10 Precision ... **23**

11 Test report ... **23**

Annex A (informative) **Details on interlaboratory comparison** ... **24**

Bibliography ... **26**